

to control, protect, and connect each towline meets the following criteria:

(1) The material and size of the terminal gear are appropriate for the strength and anticipated loading of the towline and for the environment;

(2) Each connection is secured by at least one nut with at least one cotter pin or other means of preventing its failure;

(3) The lead of the towline is appropriate to prevent sharp bends in the towline from fairlead blocks, chocks, or tackle;

(4) There is provided a method, whether mechanical or non-mechanical, that does not endanger operating personnel but that easily releases the towline;

(5) The towline is protected from abrasion or chafing by chafing gear, lagging, or other means;

(6) Except on board a vessel towing in ice on Western Rivers or one using a towline of synthetic or natural fiber, there is fitted a winch that evenly spools and tightly winds the towline; and

(7) If a winch is fitted, there is attached to the main drum a brake that has holding power appropriate for the horsepower or bollard pull of the vessel and can be operated without power to the winch.

[CGD 94-020, 61 FR 35074, July 3, 1996, as amended by USCG-1999-5151, 64 FR 67176, Dec. 1, 1999]

**§ 164.76 Towline and terminal gear for towing alongside and pushing ahead.**

The owner, master, or operator of each vessel towing alongside or pushing ahead shall ensure that the face wires, spring lines, and push gear used—

(a) Are appropriate for the vessel's horsepower;

(b) Are appropriate for the arrangement of the tow;

(c) Are frequently inspected; and

(d) Remain serviceable.

[CGD 94-020, 61 FR 35075, July 3, 1996]

**§ 164.78 Navigation under way: Towing vessels.**

(a) The owner, master, or operator of each vessel towing shall ensure that

each person directing and controlling the movement of the vessel—

(1) Understands the arrangement of the tow and the effects of maneuvering on the vessel towing and on the vessel, barge, or object being towed;

(2) Can fix the position of the vessel using installed navigational equipment, aids to navigation, geographic reference-points, and hydrographic contours;

(3) Does not fix the position of the vessel using buoys alone (Buoys are aids to navigation placed in approximate positions either to alert mariners to hazards to navigation or to indicate the orientation of a channel. They may not maintain exact charted positions, because strong or varying currents, heavy seas, ice, and collisions with vessels can move or sink them or set them adrift. Although they may corroborate a position fixed by other means, they cannot fix a position; however, if no other aids are available, buoys alone may establish an estimated position.);

(4) Evaluates the danger of each closing visual or radar contact;

(5) Knows and applies the variation and deviation, where a magnetic compass is fitted and where charts or maps have enough detail to enable this type of correction;

(6) Knows the speed and direction of the current, and the set, drift, and tidal state for the area to be transited;

(7) Proceeds at a safe speed taking into account the weather, visibility, density of traffic, draft of tow, possibility of wake damage, speed and direction of the current, and local speed-limits; and

(8) Monitors the voyage plan required by § 164.80.

(b) The owner, master, or operator of each vessel towing shall ensure that the tests and inspections required by § 164.80 are conducted and that the results are entered in the log or other record carried on board.

[CGD 94-020, 61 FR 35075, July 3, 1996, as amended by USCG-2000-6931, 68 FR 22610, Apr. 29, 2003; 69 FR 34068, June 18, 2004]

**§ 164.80 Tests, inspections, and voyage planning.**

(a) The owner, master, or operator of each towing vessel of less than 1,600 GT shall ensure that the following tests